## **REMARKS**

Claims 95-102, 104 and 113-121 are pending in the application.

Claims 95-102, 104 and 113-121 stand rejected.

Claims **95-102**, **104** and **113-121** have been amended. No new subject matter is added thereby. The present claim amendments find support throughout the Specification, including at least at paragraphs [0028], [0104], and [0144]. Applicants respectfully note that the present claim amendments are not intended as indicating Applicants' acceptance of the reasons for rejection of various claims proffered in the Office Action.

## Rejection of Claims Under 35 U.S.C. § 103

Claims 95-102, 104, and 113-121 stand rejected under 35 U.S.C. § 103(a) as being purportedly obvious over Henson, U.S. Patent No. 6,167,383 ("Henson") in view of Klencke, U.S. Patent No. 5,867,709 ("Klencke") and further in view of Hinshaw, U.S. Patent No. 6,571,192 ("Hinshaw"). Applicants respectfully traverse the obviousness rejection of pending claims 95-102, 104, and 113-121 in view of present claim amendments and following remarks.

Applicants initially observe that Henson and Klencke have already been employed in examining the present application. Therefore, Applicants hereby incorporate all discussions related to the patentability of pending claims 95-102, 104, and 113-121 in view of Henson and Klencke at least as presented in Applicants' response to the Office Action of August 13, 2008 ("Previous Response"), to the extent that those arguments are relevant.

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While not conceding that the cited references qualify as prior art, but instead to expedite prosecution, Applicants have chosen to respectfully disagree and traverse the rejection as follows, in light of the amendments made hereby. Applicants reserve the right, for example, in a continuing application to establish that the cited references, or other references cited now or hereafter, do not qualify as prior art as to an invention embodiment previously, currently, or subsequently claimed. Furthermore, Applicants' act of responding to this obviousness rejection or failure to address any specific deficiencies in Examiner's reasons for rejection of various pending claims should not be construed as Applicants' acceptance of Examiner's proffered reasons for rejection of these claims.

In order for a claim to be rendered unpatentable under 35 U.S.C. §103, the subject matter of the claim as a whole would have to be obvious to a person of ordinary skill in the art at the time the invention was made. See 35 U.S.C. §103(a). Thus, when making a determination of obviousness, the focus should be on what a person of ordinary skill in the pertinent art would have known at the time of the invention, and on what such a person would have reasonably expected to have been able to do in view of that knowledge. This is so regardless of whether the source of that knowledge and ability was documentary prior art, general knowledge in the art, or common sense. MPEP § 2141.

Applicants assert that the combination of Henson, Klencke, and Hinshaw still fails to show, teach, or suggest their limitations of amended independent claim 95, as discussed in more detail below. The cited combination of references fails to render claim 95 obvious at least because: (1) Hinshaw's limited scope of teachings, and (2) impropriety of combining the references (e.g., at the very least, combining Hinshaw with Henson).

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The amended independent claim 95 recites:

## 95. An apparatus comprising:

a computer-readable storage medium comprising a program code encoded therein, wherein

the program code is configured to be executed by a processor,

the program code comprises a plurality of logic blocks,

the logic blocks are configured to customize a product, and the logic blocks comprise

a first logic block configured to create a customizable product, wherein the customizable product comprises a set of one or more attributes,

the set of one or more attributes defines the customizable product; a second logic block configured to assign the customizable product to a customizable product class, wherein

the customizable product class is a parent class of a hierarchy, the hierarchy is configured to define a configurator,

the configurator is configured to reference the hierarchy to permit configuration of the customizable product, and

the configuration of the customizable product is performed using a customizable user interface ("UI");

a third logic block configured to add a component product class to the customizable product class, wherein

the component product class is a subclass of the customizable product class,

the component product class comprises one or more component products,

each of the one or more component products is configured to be selected using the customizable UI, and

each of the one or more component products is configured to be added to the customizable product, if the each of the one or more component products is selected using the customizable UI;

a fourth logic block configured to provide natural language templates, wherein

each template contains a fill-in-the-blank sentence in a natural language syntax;

a fifth logic block configured to add a customizable class rule to the customizable product class, wherein

the customizable class rule prohibits the selection of one or more component products for addition to the customizable product after selection of a specific component product for addition to the customizable product, and

the customizable class rule is generated by selecting one or more natural language templates, and

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filling in each blank in each selected template with one or

more of

the customizable product class, the component product class, an attribute of the customizable product class, an attribute of the component product class,

a mathematical expression, and

a non-selected natural language template; and

a sixth logic block configured to map the customizable UI to the customizable product class, wherein the customizable UI is configured to provide access structure to the

configurator.

(Emphases added.)

Applicants initially observe that Hinshaw has been primarily cited as somehow curing the deficiency in the combined teachings of Henson and Klencke—i.e., according to the Office Action, Hinshaw teaches generation of a customizable class rule using a fill-in-the-blank-based natural language template, which is not disclosed by the combined teachings of Henson and Klencke. (Office Action, pp. 5-6) Because of Hinshaw's citation against claim limitations that were argued in the Previous Response, as not being taught or suggested by the combination of Henson and Klencke, and because of the present Office Action's recognition that the combination of Henson and Klencke indeed fails to disclose those claim limitations, Applicants primarily focus on Hinshaw in the discussion below for the sake of brevity. Because of Applicants' incorporation herein of the discussion in the Previous Response regarding patentability of pending claims in view of Henson and Klencke, Applicants' election not to repeat that discussion below should not be regarded as Applicants' failure to address the combination of the three references cited in the present Office Action.

Hinshaw relates to a mattress selection system that generates—either using electrical outputs from a test bed or a user's answers to an extended online

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questionnaire—a recommendation for the most appropriate bedding choice for the user. The system of Hinshaw generates an output in the form of a bedding coefficient that can be used by a shopper to select an appropriate bedding with the assistance of a sales associate. (Hinshaw, Abstract; Summary of the Invention; col. 2, lines 4-9; col. 3, lines 45-51; and col. 4, lines 27-33.)

In contrast to Hinshaw's measurement system (the purpose of which is to evaluate pressure-sensor data from a test bed or answers to a questionnaire to provide a recommendation—in the form of a bedding coefficient—for a most appropriate bedding choice for a user (*see*, *e.g.*, Hinshaw; col. 1, lines 25-32, 47-50; col. 2, lines 8-9)), the claimed logic blocks enable a user to customize a product using a customizable user interface. In other words, Hinshaw's system fails to offer bedding for purchase via an online user interface, nor is Hinshaw's bedding available via a customizable user interface.

Furthermore, as also recited in claim 95, one or more component products of the customizable product are also selectable by the user using the customizable user interface under a condition that a customizable class rule may prohibit the selection if a specific component product is earlier selected by the user for addition to the customizable product. Moreover, no discussion, teaching, or suggestion is provided in Hinshaw as to an online selection or addition of "components" of a bedding for purchase using a customizable user interface.

As mentioned before, all a user can obtain from the Hinshaw's system is a "coefficient" representing the bedding choice most appropriate for the user; the user must then contact a sales associate to select a bed having the correct bed coefficient. (Hinshaw;

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col. 3, lines 45-51; col. 4, lines 27-33.) In other words, Hinshaw fails to show, teach, or suggest a system that can allow a user to purchase any customized product e.g., user's choice of mattress and box spring combination—online without assistance from a sales associate.

While Hinshaw makes a generalized statement that, "This questionnaire-only method could also be used by people shopping remotely, e.g., over the internet" (Hinshaw; col. 1, lines 54-56; col. 2, lines 59-61.) there is no enabling discussion provided in Hinshaw regarding (i) whether a customer can select bedding components online, (ii) how such components could be selected online by the customer to customize the customer's bed online, (iii) whether there is a customizable class rule in Hinshaw's system, and (iii) which bedding component choices would be prohibited by a customizable class rule, if there is any such class rule in Hinshaw's system. In other words, such generalized statements in Hinshaw are not supported in any cogent manner by the discussion in Hinshaw, and so, fail to convey to one skilled in the art the relevant mechanisms of an online bedding purchase system.

Furthermore, although Hinshaw cursorily declares that "it would be possible to custom-build a mattress system precisely for the subject, from the data collected" (Hinshaw, col. 2, lines 25-30), it is abundantly clear from the context of discussion in Hinshaw that Hinshaw favors a system that generates a bedding "coefficient" to assist a sales associate to select appropriate bed for the shopper. (Hinshaw; col. 1, lines 25-32; col. 4, lines 27-33.) In other words, Hinshaw again fails to teach in any enabling detail how a mattress system can be custom-built online by a customer using data collected from the customer—via test bed or an online questionnaire. As discussed previously, the

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mere generation of a bedding "coefficient" in Hinshaw fails to show, teach, or suggest an online system, on which a bedding product can be customized using selection or addition of component products via a customizable user interface. In fact, Applicants assert that the <u>recommendatory nature</u> of Hinshaw's system—whether test-bed based or questionnaire based—militates <u>against</u> offering such an online bedding purchase system to a customer where all bedding components can be selected and added for purchase using a customizable user interface.

Thus, as discussed above, Hinshaw fails to teach, suggest, or recommend a system that permits a user to configure a customizable product for purchase using a customizable user interface, as recited more fully in amended independent claim 95. Because Hinshaw also fails to teach or suggest selection of component products using the customizable user interface for addition to the customizable product being configured by the user, there is no need for, or even recognition of anything even remotely comparable to a customizable class rule that can prohibit selection of certain component product(s) (e.g., incompatible component products). Thus, Hinshaw summarily fails to show, teach, or suggest a customizable class rule, let alone a customizable class rule that is generated by (i) selecting a natural language template containing a fill-in-the-blank sentence in a natural language syntax, and (ii) filling the blank in the selected template, as recited more fully in independent claim 95.

The Office Action refers to the Abstract, col. 2, lines 42-48, and Figures 12-14 of Hinshaw (*see*, Office Action, discussion in the last paragraph on page-5) as teaching the claimed natural language template-based generation of a customizable class rule. However, as discussed above, there is no need for, or recognition of generation of such a

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class rule in Hinshaw. The cited portions of Hinshaw refer to a process of receiving data inputs—whether from pressure sensors on a test bed or from information supplied by a user on an online questionnaire—and then analyzing the data inputs to generate a bedding "coefficient" representing a most appropriate bedding choice for the user. The data inputs from the user in Hinshaw relate to measurement of physiological parameters related to mattress selection (Hinshaw, col. 1, lines 25-29); there is no discussion, teaching, or suggestion in Hinshaw that this information might somehow allow a user to select component products for a customizable, or that there is some mechanism in place in Hinshaw's system that might somehow prevent selection of one or more such component products—as in case of the claimed "customizable class rule."

As discussed previously, mere generation of a bedding coefficient is in no way comparable to or suggestive of the claimed natural template-based generation of a customizable class rule. The "customizable class rule" recited in claim 95 presents limits on the component products that can be <u>selected</u> via a user interface. By contrast, in Hinshaw, there is simply no possibility of such component product selection, particularly via any sort of user interface. Hence, Applicants respectfully assert that any attempt to analogize the data inputs/processing discussed in the cited portions of Hinshaw with the generation of the customizable class rule recited in claim 95 would be an impermissible cognitive leap that is neither supported nor suggested by the scope of teachings in Hinshaw or any extrapolation thereof.

Applicants further assert that the combination of Hinshaw with Henson, at the very least, is improper. Although the discussions in Henson, Klencke, and Hinshaw generally relate to software or the application of software, their similarity ends there.

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Klencke relates to the customization of a software product (Klencke, Abstract) and, hence, its teachings may well encounter problems, when an attempt is made to combine such teachings with the automatic mattress selection system disclosed in Hinshaw. Such incompatibilities will depend, in part, on the need to customize the software used in Hinshaw's system.

However, no such possibility of combination exists between the teachings of Henson and Hinshaw. Henson relates to a web-based online store in which a user interface enables a custom configuration of a computer system with options selected according to a prescribed user input (Henson, Abstract), whereas Hinshaw, as discussed previously, fails to teach, suggest, or recommend an online store with a user interface for a user to configure a product and its components for purchase.

Furthermore, there is no desirability or motivation to combine teachings in Henson and Hinshaw because Henson favors an online store that <u>avoids</u> the use of a sales representative (*see*, Henson, col. 1, lines 29-42; col. 15, lines 46-53), whereas Hinshaw's bedding selection system <u>requires</u> assistance from a sales associate (*see*, Hinshaw, col. 1, lines 25-32; col. 3, lines 23-24; col. 4, lines 31-33). In fact, Hinshaw's bedding recommendation system appears more akin to a system—discussed unfavorably in Henson—in which online questions and answers with customers are followed by assistance from a sales representative to conclude the purchase. (*See*, Henson, col. 1, lines 36-42.) On the other hand, Henson's system allows a customer with all product purchase options online, and not with a mere questionnaire followed by assistance from a sales associate regarding product selection. Because Henson's web-based online store teaches away from a sales associate-based product purchase system of Hinshaw,

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Applicants assert that any purported combination of Henson and Hinshaw would impermissibly distort Henson's teachings in such a way as to render Henson's online store not work for its intended purpose of providing a fully web-based online product purchase system. (*See*, *e.g.*, Henson, col. 2, lines 55-65; col. 4, lines 36-52.) Hence, Applicants assert that there is no teaching, suggestion, or motivation in Henson to combine its fully web-based <u>purchase</u> system with the incompatible, partial web-based bedding <u>recommendation</u> system of Hinshaw. Any purported combination of Henson with Hinshaw would be, at best, an improper use of hindsight and would tantamount to fitting the proverbial square peg in a round hole. Therefore, Applicants respectfully request the Examiner to withdraw Hinshaw as a cited reference because, as discussed herein, at least the combination of Hinshaw with Henson is improper.

Based on the discussion above, Applicants assert that the combination of Henson, Klencke, and Hinshaw fails to teach, reasonably suggest, or hint at <u>all</u> the limitations in the combination of claim limitations recited in the amended independent claim 95. Thus, Applicants assert that amended independent claim 95, <u>as a whole</u>, is not rendered obvious under 35 U.S.C. §103(a) by the combination of Henson, Klencke, and Hinshaw.

Without acceding to the Examiner's reasons for rejection of various dependent claims and reserving their right to proffer additional evidence of patentability of dependent claims, as necessary, Applicants assert that dependent claims 96-102, 104, and 113-121 are also patentable over the combination of Henson, Klencke, and Hinshaw, at least based on their dependence on independent claim 95. Therefore, reconsideration and allowance of claims 95-102, 104, and 113-121 is respectfully requested.

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## **CONCLUSION**

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicants hereby petition for such extensions. Applicants also hereby authorize that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to Deposit Account 502306.

I hereby certify that this correspondence is being submitted to the U.S. Patent and Trademark Office in accordance with 37 C.F.R. § 1.8 on \_\_\_\_\_\_\_ June 3, 2009 \_\_\_\_\_\_\_ by being (a) transmitted via the USPTO's electronic filing system; or (b) transmitted by facsimile to 571-273-8300; or (c) deposited with the U.S. Postal Service as First Class Mail in an envelope with sufficient postage addressed to: Mail Stop \_\_\_\_\_\_\_, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia, 22313-1450.

/ Samuel G. Campbell, III /

June 3, 2009

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Date

Respectfully submitted,

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